

~~constructed and arranged for attachment to the tree while the tree is being felled, and for separation from the rest of the tree pusher and remaining attached to the tree as the tree falls, for attaching the detachable head to the tree, and for separating the detachable head from the rest of the tree pusher as the tree falls, so that the detachable head remains attached to the tree as the tree falls.~~

Claim 2 (currently amended)

2. A tree pusher, comprising:

- a. a base;
- b. a screw-type propeller jack, pivotally mounted on the base, for urging the tree pusher against the tree;
- c. a first tube having first and second ends, the first end of the first tube being connected to the jack;
- d. a second tube having first and second ends, the second tube having a smaller cross-sectional-area than the first tube, the first end of the second tube being disposed in and fastened to the second end of the first tube;
- e. ~~a detachable head, constructed and arranged for engaging the tree, for disposition in the second end of the second tube while the tree is being felled, and for disengagement from the second end of the second tube as the tree falls, the detachable head remaining attached to the tree as the tree falls; and~~
- f. a base for the detachable head, the base for the head including a cylindrical third tube, the detachable head including a cylindrical tube or bar, the base for the head being fastened to the second end of the second tube, and providing means for movable disposition of the detachable head cylindrical tube or bar in the cylindrical third second tube; and
- g. means for supporting the detachable head, for urging the detachable head against the tree, for attaching the detachable head to the tree, and for separating the detachable head from the rest of the tree pusher as the tree falls, so that the detachable head remains attached to the tree as the tree falls.

Claim 3 (currently amended)

3. The tree pusher of claim 2, wherein the detachable head ~~comprises~~ further includes:
- ~~h. a cylindrical rigid elongated member;~~
 - h. a plate fastened perpendicularly to one end of the ~~elongated member~~ tube or bar; and
 - i. a plurality of prongs fastened obliquely to the plate, the prongs being constructed and arranged to embed themselves in the wood of a tree being felled.

Claim 4 (currently amended)

4. The tree pusher of claim 3, wherein each prong and the ~~rigid elongated member~~ tube or bar define therebetween an angle of from about five to about thirty degrees.

Claims 5 - 7 (cancelled)

Claim 8 (new)

8. The tree pusher of claim 1, wherein the detachable head includes:
- d. a cylindrical rigid elongated member;
 - e. a plate fastened perpendicularly to one end of the cylindrical rigid elongated member; and
 - f. a plurality of prongs fastened obliquely to the plate, the prongs being constructed and arranged to embed themselves in the wood of a tree being felled.

Claim 9 (new)

9. The tree pusher of claim 8, wherein each prong and the cylindrical rigid elongated member define therebetween an angle of from about five to about thirty degrees.

Claim 10 (new)

10. The tree pusher of claim 8, wherein the base for the detachable head includes:

- g. a cylindrical tube, for movable disposition therein of the cylindrical rigid elongated member of the detachable head.

Claim 11 (new)

11. A tree pusher, comprising:
- a. a base;
 - b. a detachable head;
 - c. means, mounted on the base, for supporting the detachable head, for urging the detachable head against the tree, for attaching the detachable head to the tree, and for separating the detachable head from the rest of the tree pusher as the tree falls, so that the detachable head remains attached to the tree as the tree falls;
 - d. a cylindrical rigid elongated member;
 - e. a plate fastened perpendicularly to one end of the cylindrical rigid elongated member; and
 - f. a plurality of prongs fastened obliquely to the plate, the prongs being constructed and arranged to embed themselves in the wood of a tree being felled.

Claim 12 (new)

12. The tree pusher of claim 11, wherein the base for the detachable head includes:
- g. a cylindrical tube, for movable disposition therein of the cylindrical rigid elongated member of the detachable head.

Claim 13 (new)

13. The tree pusher of claim 1, wherein the means for urging the detachable head against the tree include a screw-type propeller trailer jack, pivotally mounted on the base.

Claim 14 (new)

14. The tree pusher of claim 1, wherein the means for separating the detachable head from the rest of the tree pusher include:

- d. a cylindrical rigid elongated member;
- e. a plate fastened perpendicularly to one end of the cylindrical rigid elongated member;
- f. a plurality of prongs fastened obliquely to the plate, the prongs being constructed and arranged to embed themselves in the wood of the tree being felled; and
- g. a cylindrical tube, for movable disposition therein of the cylindrical rigid elongated member of the detachable head.

Claim 15 (new)

15. The tree pusher of claim 13, wherein each prong and the cylindrical rigid elongated member define therebetween an angle of from about five to about thirty degrees.

Claim 16 (new)

16. The tree pusher of claim 14, wherein each prong and the cylindrical rigid elongated member define therebetween an angle of from about five to about thirty degrees.

SUMMARY OF THE OFFICE ACTION

Claims 1 – 7[5] are pending in the application.

Claims 6 and 7 are withdrawn from consideration.

Claims 1 – 5 are rejected.

The specification/disclosure is objected to by the Examiner.

The drawings filed on 06 August 2003 are objected to by the Examiner.

THE CLAIMED INVENTION

The present invention, in a first aspect, provides a tree pusher comprising (a) a base; (b) a detachable head; and (c) means, mounted on the base, for supporting the detachable head, for urging the detachable head against the tree, for attaching the detachable head to the tree, and for separating the detachable head from the rest of the tree pusher as the tree falls, so that the detachable head remains attached to the tree as the tree falls.

The detachable head includes (d) a cylindrical rigid elongated member; (e) a plate fastened perpendicularly to one end of the cylindrical rigid elongated member; and (f) a plurality of prongs fastened obliquely to the plate, the prongs being constructed and arranged to embed themselves in the wood of a tree being felled. Each prong and the cylindrical rigid elongated member define therebetween an angle of from about five to about thirty degrees.

The detachable head further includes (g) a cylindrical tube, for movable disposition therein of the cylindrical rigid elongated member of the detachable head.

In a second aspect the invention provides a tree pusher comprising (a) a base; (b) a screw-type propeller jack, pivotally mounted on the base, for urging the tree pusher against the tree; (c) a first tube having first and second ends, the first end of the first tube being connected to the jack; (d) a second tube having first and second ends, the second tube having a smaller cross-sectional-area than the first tube, the first end of the second tube being disposed in and fastened to the second end of the first tube; (e) a detachable head; (f) a base for the detachable head, the base for the head including a cylindrical third tube, the detachable head including a cylindrical tube or bar, the base for the head being fastened to the second end of the second tube, and providing means for movable disposition of the cylindrical tube or bar in the cylindrical third tube; and (g) means for supporting the detachable head, for attaching the detachable head to the tree, and for separating the detachable head from the rest of the tree pusher as the tree falls, so that the detachable head remains attached to the tree as the tree falls .

The detachable head includes (h) a plate fastened perpendicularly to one end of the cylindrical tube or bar; and (i) a plurality of prongs fastened obliquely to the plate, the

prongs being constructed and arranged to embed themselves in the wood of a tree being felled. Each prong and the cylindrical rigid elongated member define therebetween an angle of from about five to about thirty degrees.

SCOPE OF THE PRIOR ART

U.S. Patent No. 4,564,173 to Atherton et al. discloses an apparatus, in combination with a bumper jack, for pushing a tree over when the tree is being cut down. When a base connected to the bumper jack is placed on a ground surface, the apparatus is tipped at an angle between the ground and the tree, and a jack handle will operate a jack mechanism to rise along a jack post, causing a support member to push a shaft through an aperture in a guide post until points on a tip member contact the tree, pushing the tree over as the tree is being cut down. Prongs on the tip member are parallel to the shaft. The tip member (30[20]) is affixed onto top end (74) of the shaft (28) by a set screw (76).

U.S. Patent No. 2,960,309 to Swanson discloses a tree-felling jack comprising a flat anchor plate adapted to overlies the ground and having a plurality of spaced ground-penetrating spades of identical length angularly depending in parallelism therefrom; a curved anchor plate adapted to overlies a tree trunk and having a plurality of spaced tree-penetrating prongs of identical length angularly projecting in parallelism therefrom; a first elongated pressure member of rigid material immovably fixed to the flat anchor plate and extending angularly upwardly therefrom; a second elongated pressure member of rigid material immovably fixed to the curved anchor plate and extending angularly downwardly therefrom in axial alignment with the first member; and hydraulic jack mechanism having a cylinder coaxial with, and interposed between, the members for slideably applying thrust longitudinally of the pressure members; the spades, prongs, jack cylinder, and pressure members all being in parallelism for quick release of the jack upon felling of a tree in a direction away therefrom. The spades (42) and prongs (35) of the anchor plate (25) are each disposed in two spaced parallel lines. The prongs (35) extend upwardly from the plate (25), and the plate (25) permits a firm grip without excessive penetration while also causing the plate to fall away from a tree as the tree falls.

THE EXAMINER'S RATIONALE

In rejecting claims 1 – 5 under the judicially-created doctrine of obviousness-type double patenting over claims 1 – 11 of U.S. Patent No. 6,604,562 [6,604,561] to Smith, the Examiner states that, although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the pending application are merely a broader re-worded version of that of the patent [application], and fail to set forth any differing subject matter.

In rejecting claim 1 under 35 U.S.C. 112, the Examiner states that the claim fails to positively recite any structure necessary to carry out the functional recitation, “the detachable head being constructed and arranged for attachment . . . and separation”

In rejecting claim 2 under 35 U.S.C. 112, the Examiner states that the claim fails to set forth structure necessary to carry out the functional recitations, “. . . a detachable head, constructed and arranged for engaging the tree . . . and for disengagement from the second end . . . the head remaining attached to the tree”

In rejecting claim 1 under 35 U.S.C. 102(b) over U.S. Patent No. 4,564,173 to Atherton et al., the Examiner states that Atherton discloses a tree pusher (fig.1) comprising a base (22) and a detachable head (figs. 2, 4); and means/jack, mounted on the base, for supporting the detachable head, and for urging the detachable against the tree (10, 12, 14, 16); the detachable head being constructed and arranged for attachment to the tree while the tree is being felled, and for separation from the rest of the tree pusher and remaining attached to the tree as the tree falls. The Examiner notes that the screw of head 30 allows the head to be detachable.

In rejecting claim 2 under 35 U.S.C. 103(a) over U.S. Patent No. 2,960,309 to Swanson in view of U.S. Patent No. 4,564,173 to Atherton et al., the Examiner states that Swanson discloses a tree pusher (fig. 1) comprising a base; a screw jack (26); a first tube (28) having first and second ends, the first end connected to the jack (26); a second tube (27) having first and second ends, the second tube having a smaller cross-sectional area than the first tube (fig. 1), the first end of the second tube being disposed in and fastened to the second end of the first tube; a head (fig. 2); and a base (25) for the head (fig. 2).

The Examiner observes that Swanson does not disclose the head to be detachable, but states that Atherton teaches in a similar art the use of a detachable head (30) in conjunction with a jack mechanism for pushing a tree during a felling operation; and that, because the references are from such closely-related art, it would have been obvious to replace Swanson's non-detachable head with a detachable head for ease of replacement or adjustability as taught by Atherton.